Fact Sheet
June 2001

Management of Spent Lead-Acid Batteries

It is DTSC's mission to protect public health and the environment from harmful exposure to hazardous substances.

State of California

California Environmental Protection Agency

The Duty Officers of the Department of Toxic Substances Control (DTSC) prepared this fact sheet to provide general information about the hazardous waste requirements and exemptions for managing lead-acid batteries. This fact sheet covers the accumulation, transportation and recycling of those batteries. Throughout this fact sheet, numbers appearing as (66263.42) represent citations from Title 22, California Code of Regulations (22 CCR), or, when preceded by "HSC," from the California Health and Safety Code. Clicking on the numbers will take you to sites containing the regulations. If you generate hazardous waste, you should consult with your Certified Unified Program Agency (CUPA). You may be subject to local ordinances. Finally, DTSC strongly encourages all businesses generating hazardous waste to consider waste minimization, source reduction and pollution prevention. Go to the Duty Officer FAQs for useful links.

DOES THE INFORMATION IN THIS FACT SHEET APPLY TO ME?

The batteries discussed here are equivalent in size and type to common vehicle batteries, including utility batteries and those used in emergency power supplies. Because they contain lead and sulfuric acid, lead-acid battery **disposal** is fully regulated as a hazardous waste management activity, but when intact lead-acid batteries are managed for **recycling,** the handling requirements are relaxed. Processing lead-acid batteries for recycling by draining the electrolyte, crushing, smelting or other physical methods is a fully regulated hazardous waste activity that requires a hazardous waste treatment permit. Contact your local DTSC Facility Permitting Unit if you intend to process batteries in this manner. The "universal waste" regulations address small, sealed lead-acid "gel-cell" type batteries and large utility batteries, such as fork lift batteries. See section 66273.2 for the universal waste battery management regulations.

The regulations addressing used lead-acid battery management are found in 66266.80 and 66266.81. Generators of lead-acid batteries include vehicle

owners, garages, parts stores and service stations, as well as other businesses and factories that generate dead or damaged batteries. If you generate no more than 10 batteries per year, or store or transport no more than 10 batteries at one time, you are not subject to the reporting and record keeping requirements given in the battery regulations as long as the batteries will go to someone who stores, recycles, uses, reuses or reclaims them. This also applies to people who trade in an old battery for a new one and to the person accepting the trade-in. Persons or businesses that generate more than 10 batteries per year, or who store or transport more than 10 at one time, may still manage them under the relaxed standards, but must keep records about the batteries as described below.

How do consumers get rid of spent batteries?

Retailers are required to accept the trade-in of a spent lead-acid battery by a consumer upon purchase of a new one, (HSC 25215.3**),** and certain dealers may accept them without a purchase (but you should ask first). Some battery wholesalers also accept them from businesses and the public. The public can also take their lead-acid batteries to a household hazardous waste collection location and to certain recycling centers. Call 1-800-CLEANUP or visit this HHW Community Locator (have your zip code ready) and follow the prompts. Again, you should inquire with the facility before taking your batteries in. In some places, conditionally exempt small quantity generators (businesses generating less than 220 pounds of hazardous waste per month) may also take their batteries to one of these locations. If you are taking your batteries to one of these locations, you do not need a manifest or a bill of lading, nor are there reporting requirements.

It is illegal to dispose of, or even try to dispose of, a lead-acid battery on or in any land, including landfills, lakes, streams or the ocean. Abandoning lead-acid batteries on streets and parking lots or placing them in waste dumpsters also constitutes illegal hazardous waste disposal, and can be prosecuted under state law. The penalty can be up to $25,000 per occurrence. If you plan to do anything other than recycle these batteries, you must manage them as hazardous waste.

What are the rules about accumulating and storing spent batteries?

The reason that spent batteries are managed as hazardous waste is that batteries can leak hazardous acid and lead if they are cracked, overturned or missing a cap. There are many sites in California where mountains of broken batteries left a legacy of highly contaminated soil and groundwater. Businesses must take care in the way that they accumulate batteries prior to shipment to a recycler. Undamaged batteries should be stored upright on a covered pallet over a non-reactive, curbed and sealed surface such as coated concrete or asphalt, and care should be taken to prevent the terminals from short-circuiting. Check with your local hazardous waste agency to see if there are additional local requirements or recommendations for the storage of batteries. "Damaged batteries" are batteries that are cracked, broken, or missing one or more caps. You must store and transport damaged batteries in non-reactive, structurally-secure, closed containers such as polyethylene buckets or drums. If missing caps can be replaced and there are

no other leaks or damage, the battery can be managed along with intact batteries. Damaged and intact batteries can be transported together. You must label the container holding damaged batteries in ink or paint with the date the first battery was placed there. This is considered the accumulation start date. For other packaging advice, check with the person that will be receiving the shipment of batteries from you.

Whether you are a generator or considered to be an interim storage facility (one which holds batteries until they are sent to a battery breaker or recycler), and if you keep one ton or less, you may store those batteries for no more than one year at any single location. If you hold more than one ton of batteries at one location, you may not keep them for longer than 180 days. If these quantities or times are exceeded, the business is no longer exempt from the regulations for generation, storage and transportation of hazardous waste.

If I am shipping spent batteries, what should I know about transportation requirements?

If you ship more than 10 batteries at a time, a legible hazardous waste manifest or a legible bill of lading must accompany the shipment. The generator, transporter and storage, recycling or disposal facility each must retain their copies of either of those documents for three years. The bill of lading must be dated and show the names and addresses of the generator, transporter, and receiving location, as well as the number of batteries transported. 13 CCR Section 1161

The transporter must make certain that the batteries are loaded so as to prevent damage, leakage of lead or acid, or short circuits, and must comply with all Department of Transportation (DOT) regulations for hazardous materials. Title 49 Code of Federal Regulations (CFR) Parts 100-185. You may transport damaged batteries (packaged as described above) with intact batteries, as long as all DOT standards are met.

What kind of record keeping and reporting is required?

Brokers and handlers of more than 10 batteries per year and those who transport more than 10 batteries at a time are required by the battery regulations to keep all copies of bills of lading and manifests related to the transportation of lead-acid batteries for a period of at least three years. DTSC no longer requires you to submit an annual battery report per section 66266.81(a)(7)(C), but you must keep the data that would enable you to create such a report. That data should be found on the battery shipment bills of lading and manifests mentioned above.

If you cannot find the answer to your question in this fact sheet, please contact the Duty Officers directly. You can call them at 800-728-6942, or contact them via the Department of Toxic Substances Control website -- http://www.dtsc.ca.gov -- click on Frequently Asked Questions, and you will go to a map of California with links to the Duty Officers' email.

DTSC Duty Officers provide informal guidance only regarding management of hazardous waste for the convenience of the public. Such advice is not binding upon DTSC, nor does it have the force of law. If you would like a formal opinion on a matter

by DTSC, please contact the responsible program office directly. You should also refer to the statutes and regulations, DTSC Policies and Procedures, and other formal documents.

If you believe that you have received incorrect information from a Duty Officer, please contact one of the Regional Coordinators (Carol Northrup in Northern California, at 510-540-3919; John Hinton in Southern California, at 818-551-2823). We also encourage you to complete a Cal/EPA Customer Satisfaction survey (http://www.calepa.ca.gov/about/custsvc.htm) so that we may improve our Duty Officer Program.